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(54) SYSTEMS AND METHODS FOR CONTROLLING A RESONANT DEVICE FOR GENERATING VIBROTACTILE HAPTIC EFFECTS

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(57) **ABSTRACT**

Systems and methods for controlling a resonant device are described. One described method for braking an actuator includes generating a first actuator signal configured to drive the actuator, the first actuator signal having a first frequency approximately resonant to the actuator, and transmitting the first actuator signal to the actuator. The method also includes generating a second actuator signal, having a second frequency approximately 180 degrees out of phase to the first frequency, the second actuator signal configured to cause a braking force on the actuator, and transmitting the second actuator signal to the actuator.